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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,190

09/21/2005

Youval Katzman

27001U

7379

20529

7590

10/29/2007

NATH & ASSOCIATES

112 South West Street

Alexandria, VA 22314

EXAMINER

SCHNEIDER, CRAIG M

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

10/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/550,190

Applicant(s)

KATZMAN ET AL.

Examiner

Craig M. Schneider

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-15 and 17-38 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-15,17-30 and 33-38 is/are rejected.
- 7) ☒ Claim(s) 31 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/21/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/27/2006
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species A in the reply filed on 9/6/07 is acknowledged.
2. Claims 16 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/6/07.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the control mechanism for adjusting the moment of rotation about a pivoted end in claim 17, the dampening arrangements of claim 18, the suspension arrangement of claims 19 and 20, that the support lever is received within a water tight casing of claim 22, the screen of claim 24, and the indicator with indicia on the support lever of claim 26 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "118" and "119" have both been used to designate pivot axle (Figure 7C 118 is used when should be 119).
5. The drawings are objected to because in Figure 7C "128" should be --129--.
6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 330 in Figure 8B. Corrected drawing sheets in compliance with 37 CFR

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1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The disclosure is objected to because of the following informalities:

On page 1, line 18 "gasses" should be --gases--.

On page 10, lines 9 and 16 "230" should be --238--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 3, 7-10, 14-15, 17-19, 21, 25, 37, and 38 are rejected as understood under 35 U.S.C. 102(b) as being anticipated by Borden (1,936,537).

Borden discloses a gas purge valve comprising a housing (1) formed with an inlet (39) and an outlet (area surrounded by 9), the outlet formed with a valve seating (9), and a sealing assembly (8) comprising a sealing member displaceable between an open position and a closed position; wherein the sealing assembly is supported by an external support lever mechanism (14 11, 10, and 12) extending outside the housing, to thereby displace the sealing assembly into sealing engagement with the valve seating at the closed position, the gas purge valve further comprising a float member (7) articulated to the sealing assembly within the housing, and being displaceable susceptible to liquid level within the housing (page 1, line 42 to page 2, line 30).

Regarding claim 8, wherein the support lever is pre-loaded (13) so as to effect engagement of the sealing assembly with the valve seating.

Regarding claim 17, wherein the support lever is provided with a control mechanism (13) for adjusting the moment of rotation about a pivoted end thereof.

Regarding claim 18, wherein the support lever is provided with dampening arrangements (13) to dampen displacement of the sealing assembly into the closed or open position (the weight slows the opening of the valve).

Regarding claim 25, the intended use of the gas purge valve does not patentably distinguish over the prior art since the device could be used with a sewage system.

10. Claims 1, 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Covell (815,268).

Covell discloses a gas purge valve comprising a housing (5, 6, and 7) formed with an inlet (9) and an outlet (16), the outlet formed with a valve seating (the seat of

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valve 17), and a sealing assembly (17) comprising a sealing member displaceable between an open position and a closed position; wherein the sealing assembly is supported by an external support lever mechanism (24 and 18) extending outside the housing, to thereby displace the sealing assembly into sealing engagement with the valve seating at the closed position, the gas purge valve further comprising a float member (20) articulated to the sealing assembly within the housing, and being displaceable susceptible to liquid level within the housing (page 1, lines 36-112).

Regarding claim 4, wherein the float member is suspended from the sealing assembly by a rigid connecting rod (21).

Regarding claim 5, wherein an end of the connecting rod is pivotally coupled (where 21 and 24 connect) to the sealing assembly.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Covell in view of Kennedy (5,386,844).

Covell discloses all the features of the claimed invention except that the connecting rod is spring-biased to dampen motion of the connecting rod. Kennedy discloses the use of a spring (11) to dampen the motion of the connecting rod (col. 3, lines 46-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the spring of Kennedy onto the joints of the rod/sealing assembly of Covell, to utilize a smaller float (col. 3, lines 51-53).

14. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borden in view of Schutte et al. (801,161).

Borden discloses using a counterweight as the pre-loading mechanism instead of wherein the pre-loading mechanism comprises an axle attached to the support lever and received within a casing fixedly supported by the housing, a coiled spring having one end thereof engaged with the axle and an opposed end thereof engaged with a tension setting nut rotatable with respect to the axle in a first sense to tension the spring, and in an opposite sense to loosen the spring. Schutte et al. disclose a pre-loading mechanism that comprises an axle (P1) attached to the support lever (i) and received within a casing (O) fixedly supported by the housing, a coiled spring (P3)

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having one end thereof engaged with the axle and an opposed end thereof engaged with a tension setting nut (O2 and O3) rotatable with respect to the axle in a first sense to tension the spring, and in an opposite sense to loosen the spring. Schutte et al. shows that the counterweight and the adjustable spring loaded mechanism are art-recognized equivalents. Therefore, because these two elements were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the spring loaded mechanism for the counterweight.

Regarding claim 13, the examiner is taking official notice that having the casing of the pre-loading mechanism water and dirt sealed is old and well known in the art and would be combined with the device of Borden/Schutte et al. for reasons that are old and well known in the art.

15. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borden.

Borden discloses all the features of the claimed invention except that the suspension arrangement comprises a viscous or visco-elastic damping assembly associated with a pivoted end of the support lever.

The examiner takes official notice that it would have been obvious to replace the counterweight of Borden with a viscous or visco-elastic damping assembly, to utilize the steady motion of both opening and closing the valve assembly.

16. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borden.

The examiner takes official notice that having the support lever received within a water-tight casing is old and well known in the art and would be combined with the device of Borden for reasons that are old and well known in the art.

Regarding claim 23, wherein the casing is received within an outlet duct (16) extending from the valve outlet and being in flow communication therewith.

The examiner takes official notice that having a screen fitted to the outlet duct is old and well known in the art and would be combined with the device of Borden for reasons that are old and well known in the art.

17. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borden.

The examiner takes official notice that having the support lever comprising an indicator for generating indicia corresponding with the state of the sealing assembly is old and well known in the art and would be combined with the device of Borden for reasons that are old and well known in the art.

18. Claims 27-30 and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borden in view of Zakai (4,770,201).

Borden discloses all the features of the claimed invention except that the valve outlet is of the combined type comprising a major, kinetic outlet for high flow rate gas flow, and an auxiliary, automatic outlet for low flow rate gas flow. Zakai discloses the valve outlet is of the combined type comprising a major, kinetic outlet (34) for high flow rate gas flow, and an auxiliary, automatic outlet (35) for low flow rate gas flow (col. 5, line 1-58).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the valve closing element of Borden with the major and auxiliary closing element of Zakai, to allow for slow closure of the valve instead of a sudden closure.

Allowable Subject Matter

19. Claims 31 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Perkins (5,794,646 and 6,276,390) disclose a major valve closure with an auxiliary valve closure in combination with a float valve.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig M. Schneider whose telephone number is (571) 272-3607. The examiner can normally be reached on M-F 8:30 -5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMS *CMS*
October 24, 2007


RAMESH KIRSHNAMURTHY
PRIMARY EXAMINER